

# Service Manual

## ViewSonic VE150 & VE150B

Model No. VLCDS21533-1(b)

*15" Color TFT LCD Display*



(VE150\_SM\_35 - Rev. 2 – June 2000)

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## 1. PRECAUTION AND NOTICES

### 1.1. SAFETY PRECAUTIONS

This monitor is manufactured and tested on a ground principle that a user's safety comes first. However, improper use or installation may cause damage to the monitor as well as to the user. Carefully go over the following WARNINGS before installing and keep this guide handy.

#### WARNINGS:

- ◆ This monitor should be operated only at the correct power sources indicated on the label on the rear end of the monitor. If you're unsure of the power supply in your residence, consult your local dealer or power company.
- ◆ Use only the special power adapter that comes with this monitor for power input.
- ◆ Do not try to repair the monitor yourself as it contains no user-serviceable parts. This monitor should only be repaired by a qualified technician.
- ◆ Do not remove the monitor cabinet. There is high-voltage parts inside that may cause electric shock to human bodies, even when the power cord is unplugged.
- ◆ Stop using the monitor if the cabinet is damaged. Have it checked by a service technician.
- ◆ Put your monitor only in a clean, dry environment. If it gets wet, unplug the power cable immediately and consult your service technician.
- ◆ Always unplug the monitor before cleaning it. Clean the cabinet with a clean, dry cloth. Apply non-ammonia based cleaner onto the cloth, not directly onto the glass screen.
- ◆ Keep the monitor away from magnetic objects, motors, TV sets, and transformer.
- ◆ Do not place heavy objects on the monitor or power cord.

### 1.2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety visual inspections and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltages, wattage, etc. Before replacing any of these components read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

### 1.3. SERVICE NOTES

1. When replacing parts or circuit boards, clamp the lead wires around terminals before soldering.
2. When replacing a high wattage resistor (more than 1W of metal oxide film resistor) in circuit board, keep the resistor about 5mm away from circuit board.
3. Keep wires away from high voltage, high temperature components and sharp edges.
4. Keep wires in their original position so as to reduce interference.
5. Usage of this product please refer to also user's manual.

## 2. SERVICE TOOL & EQUIPMENT REQUIRED

1. SIGNAL GEN.
2. MULTIMETER
3. OSCILLOSCOPE
4. SCREW DRIVER
5. IRON
6. ABSORBER
7. SOLDER
8. DUMMY LOAD (5Ω/200W)

## 3. SPECIFICATIONS

### 3.1. PRODUCT SPECIFICATIONS

LCD Panel	15.0" TFT
Power Management	Energy Star compliant VESA DPMS compatible < 5W
Displayable Resolution	XVGA 1024×768 max.
Pixel Dimension	0.297×0.297mm (15.1" TFT)
LCD Display Color	16.7M Color Max. (18bit)
Viewing Angle	CR ≥ 5 Horizontal: -60°+60° Vertical: -55°+45°
Tilt	+15°, -5°
Contrast Ratio	350 : 1 (typ.)
Brightness	200 cd/m <sup>2</sup> (typ.)
Response Time	Tr: 13 ms Tf: 27ms
Active Display Area	304.1mm×228.1mm
Temperature	Operating: 0°C ~ +35°C Storage: -20°C ~ +60°C
Compliance	UL, CDA, DHHS, TÜV, CE, FCC-B, VDE-B, Energy Star.
Power	Voltage: 100~240 V Consumption: 30 Watts

## 3.2. FACTORY PRESET MODE TIMING CHART

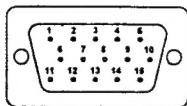
ITEM	640×400 70HZ	640×480 60HZ	640×480 67HZ	640×480 75HZ	800×600 60HZ
TIMING	640×400 70HZ	640×480 60HZ	640×480 67HZ	640×480 75HZ	800×600 60HZ
Pixel Rate	25.175MHZ	25.175MHZ	30.240MHZ	31.500MHZ	40.000MHZ
H TOTAL	31.778us	31.778us	28.571us	26.667us	26.400us
H DISPLAY	25.422us	25.422us	21.164us	20.317us	20.000us
H B-Porch	1.907us	1.907us	3.175us	3.810us	2.200us
H Width	3.813us	3.813us	2.116us	2.032us	3.200us
H Border	0.318us	0.318us	0.000us	0.000us	0.000us
V TOTAL	14.268ms	16.683ms	15.000ms	13.334ms	16.579ms
V DISPLAY	12.711ms	15.253ms	13.714ms	12.800ms	15.840ms
V B-Porch	1.112ms	1.049ms	1.114ms	0.427ms	0.607ms
Vs Width	0.064ms	0.064ms	0.086ms	0.080ms	0.106ms
V Border	0.222ms	0.254ms	0.000ms	0.000ms	0.000ms
H/V Sync	-/+	-/-	-/-	-/-	+/+
Interlace	No.	No.	No.	No.	No.

ITEM	640×480 75HZ	832×624 74.5HZ	1024×768 60HZ	1024×768 75HZ	1024×768 75Hz
TIMING	800×600 75HZ	832×624 74.5HZ	1024×768 60HZ	1024×768 75HZ	1024×768 75Hz
Pixel Rate	48.500MHZ	57.280MHZ	65.000MHZ	78.750MHZ	80.000MHZ
H TOTAL	21.333us	20.112us	20.677us	16.660us	16.600us
H DISPLAY	16.162us	14.525us	15.754us	13.003us	12.800us
H B-Porch	3.232us	3.771us	2.462us	2.235us	2.200us
H Width	1.616us	1.118us	2.092us	1.219us	1.200us
H Border	0.000us	0.000us	0.000us	0.000us	0.000us
V TOTAL	13.333ms	13.417ms	16.666ms	13.328ms	13.346ms
V DISPLAY	12.800ms	12.552ms	15.880ms	12.795ms	12.749ms
V B-Porch	0.448ms	0.784ms	0.600ms	0.466ms	0.498ms
Vs Width	0.064ms	0.060ms	0.124ms	0.050ms	0.050ms
V Border	0.000ms	0.00ms	0.000ms	0.000ms	0.000ms
H/V Sync	+/+	-/-	-/-	+/+	-/-
Interlace	No.	No.	No.	No.	No.

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### 3.3. D-SUB CONNECTOR

#### D-SUB 15 PIN CONNECTOR



1.R	6.GND	11.GND
2.G	7.GND	12.SDA
3.B	8.GND	13.H.SYNC
4.GND	9. NC	14.V.SYNC
5.NC	10.GND	15.SCL

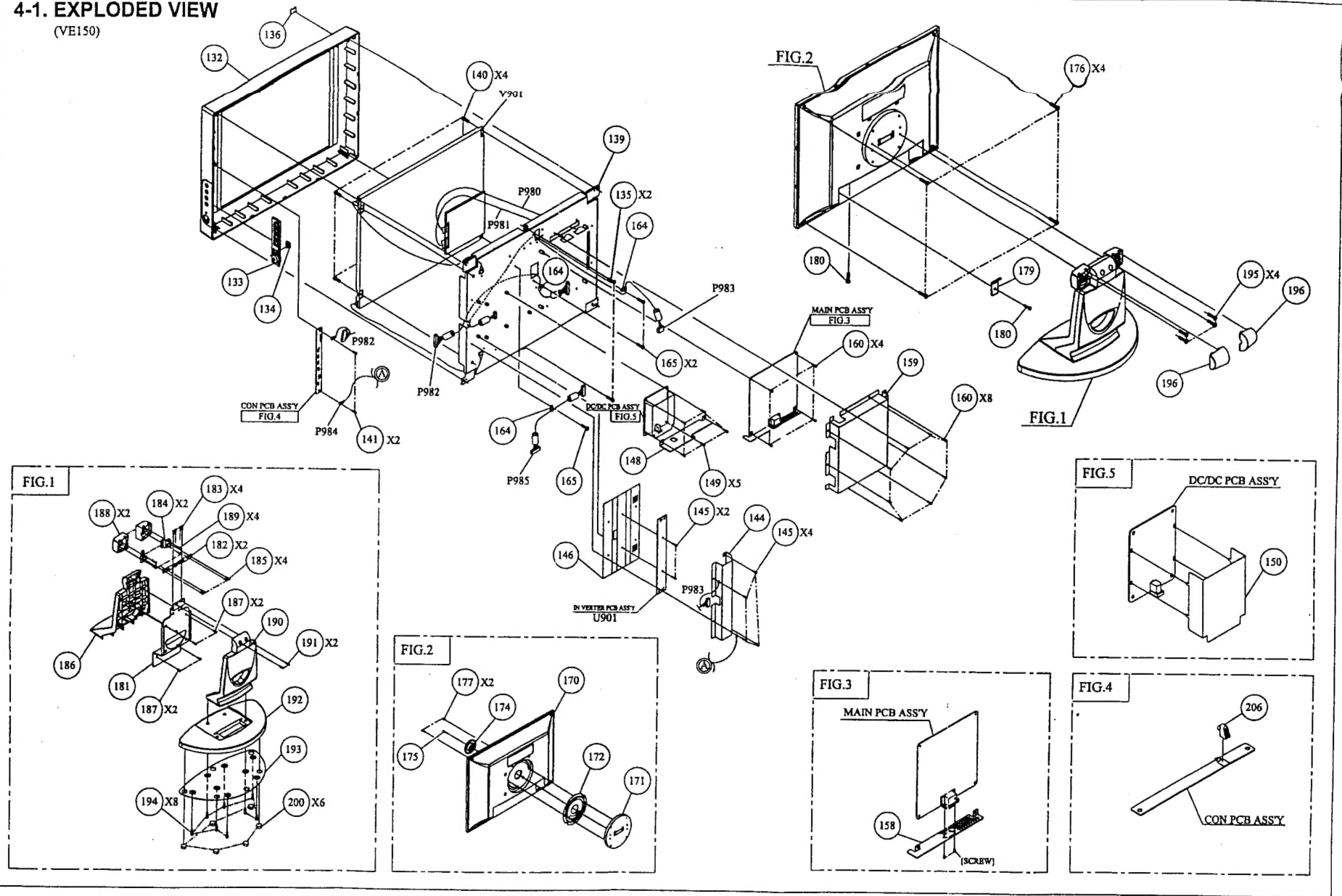
#### SIGNAL LEVEL

CONNECTOR	SIGNAL	DESCRIPTION
R	RED	0.7vp-p(VIDEO)
G	GREEN	0.7vp-p(VIDEO)
B	BLUE	0.7vp-p(VIDEO)
H	H/SYNC	TTL positive or negative
V	V/SYNC	TTL positive or negative
SDA	DDCI/2B	TTL
SCL	DDCI/2B	TTL



# 4-1. EXPLODED VIEW

(VE150)



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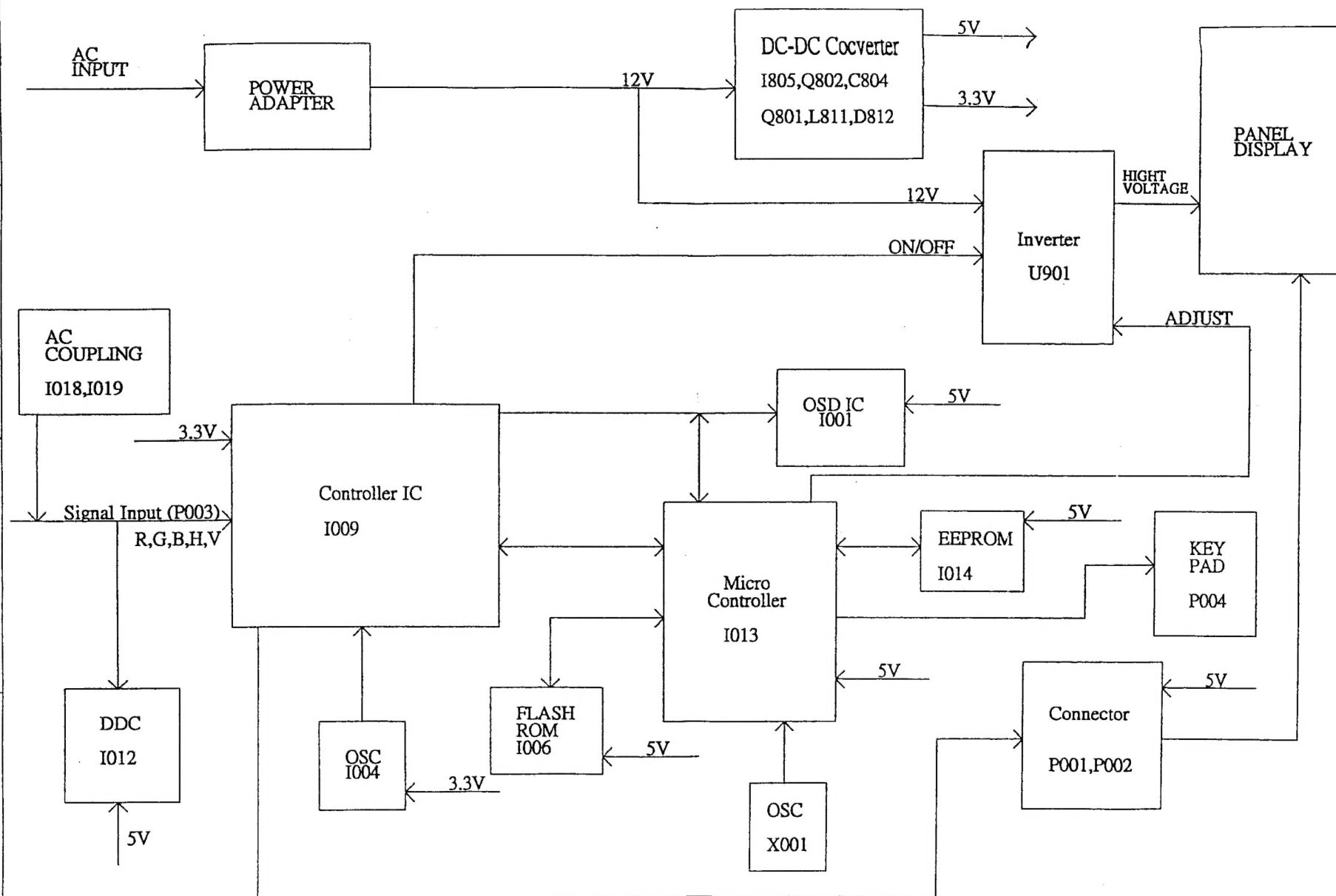
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## 4-2. EXPLODED VIEW PARTS LIST

Ref. No.	Source	Part No.	DESCRIPTION	SPECIFICATION	Q'TY	REMARK
132		2024256304	PANEL	JT156E V.S VE150 PC+ABS/GY7521	1	Bik P/N - 2024256305
133		2046254202	PUSH BUTTON	JT156E PC+ABS/GY7521	1	
134		2053255400	INDICATOR	JT156E2 POWER LED PMMA 94HB	1	
135		2084730082	SCREW,BND T+	M3X8(BND T+)	2	
136		2051350200	NAME PLATE	JD144V3 VIEWSONIC 3BIRDS AL	1	
139		2071852700	BRACKET, FIX	JT156E SECC 1.2t 15LCD MITSUBI	1	
140		2085730082	SCREW, B OTW+	SCREW B OTW+ M3X8	4	
141		2084730082	SCREW, BND T+	M3X8(BND T+)	2	
144		2071653700	SHIELD PLATE	JT156E SPTE t=0.3 FOR INVERTER	1	
145		2082730062	SCREW, BND+	M3X6(BND+)	6	
146		2072450100	INSULATOR	JT146E1 PVC 185LX25.3WX0.2mm	1	
148		2071853600	BRACKET, FIX	JT156E SECC1.2t BKT-POWER TCO	1	
149		2082730062	SCREW, BND+	M3X6(BND+)	5	
150		2071654600	SHIELD PLATE	JT156E SPTE 0.3t	1	
158		2071852900	BRACKET, FIX	JT156E SECC 1.2t BKT-SIGNAL	1	
159		2071653600	SHIELD PLATE	JT156E SPTE T=0.3 FOR CTRL	1	Bik P/N - 2022254504
160		2082730062	SCREW, BND+	M3X6(BND+)	12	
164		2071651900	SHIELD PLATE	JT156A PBSP T=0.5mmd=φ 4.4mm	3	
165		2082730062	SCREW, BND+	M3X6(BND+)	3	
170		2022254503	CABI BACK	JT156E PC+ABS/GY7521	1	
171		2108251402	SWIVEL	JT156E PC+ABS/GY7521	1	
172		2071853000	BRACKET, FIX	JT156E SECC 1.2t BKT-SWIVEL	1	
174		2074156200	HOLDER	JT156E2 D15H DURAON M90	1	
175		2084740142	SCREW, BND T+	M4X14(BND T+)	1	
176		2082730122	SCREW, BND+	M3X12(BND+)	4	
177		2084730082	SCREW, BND T+	M3X8(BND T+)	2	
179		2025250102	LID	JT156E PC+ABS/GY7521	1	
180		2082730062	SCREW, BND+	M3X6(BND+)	2	
181		2071852300	BRACKET, FIX	JT156E2 bracket(arm) secc t=2	1	Bik P/N - 2028251503
182		2106650200	HINGE	JT156E LCD HINGE T:25-30KGF.CM	2	
183		2085740102	SCREW, B OTW+	SCREW B OTW+ M4X10	4	
184		2071852500	BRACKET, FIX	JT156E2 BRACKET(HINGE)SECC t=2	2	
185		2085740102	SCREW, B OTW+	SCREW B OTW+ M4X10	4	
186		2028550302	ARM	JT156E ARM(F) PC+ABS/GY7521	1	
187		2084740102	SCREW, BND T+	M4X10(BND T+)	4	
188		2027250302	DUST COVER	JT156E HINGE(F) PC+ABS/GY7521	2	
189		2084740102	SCREW, BND T+	M4X10(BND T+)	4	
190		2028550402	ARM	JT156E ARM(B)PC+ABS/GY7521	1	
191		2084740102	SCREW, BND T+	M4X10(BND T+)	2	
192		2028251502	STAND	JT156E PC+ABS/GY7521	1	
193		2071852400	BRACKET, FIX	JT156E SPEE It FOR STAND	1	
194		2084740102	SCREW, BND T+	M4X10(BND T+)	8	
195		2082730122	SCREW, BND+	M3X12(BND+)	4	
196		2027250402	DUST COVER	JT156E HINGE(B) PC+ABS/GY7521	2	
200		2039801701	LEG	JD144B SBR φ 11.8X5t BLACK	6	
206		2074150900	HOLDER	NYLON 66	1	

## 5. BLOCK DIAGRAM

## BLOCK DIAGRAM



VE150 9/05/1999

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# 6. SCHEMATIC DIAGRAM

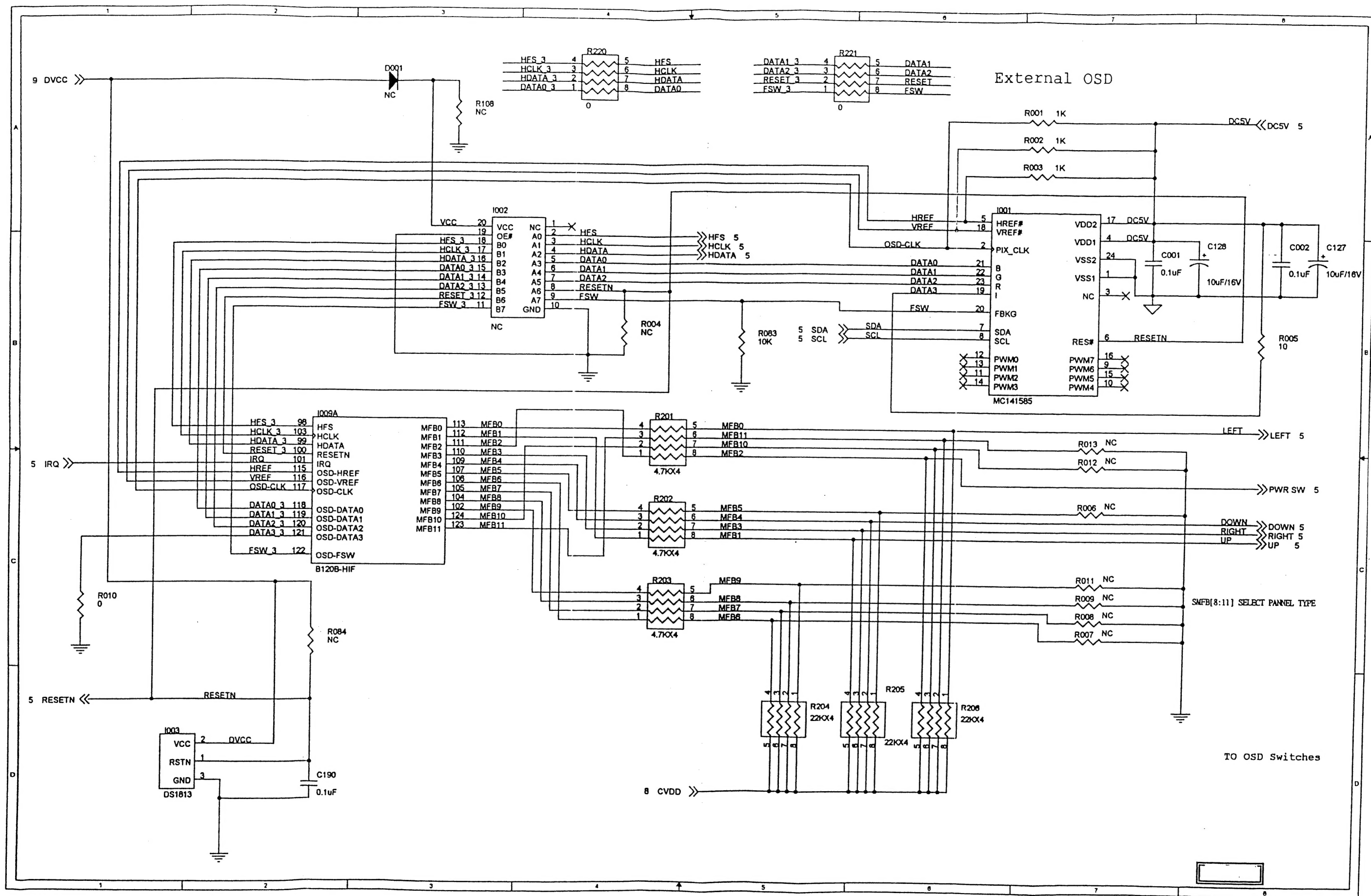
The schematic diagram illustrates the internal circuitry and connections of the B1208-CR7BC and B1208-ADC components. It includes various signal paths, power supplies, and test points.

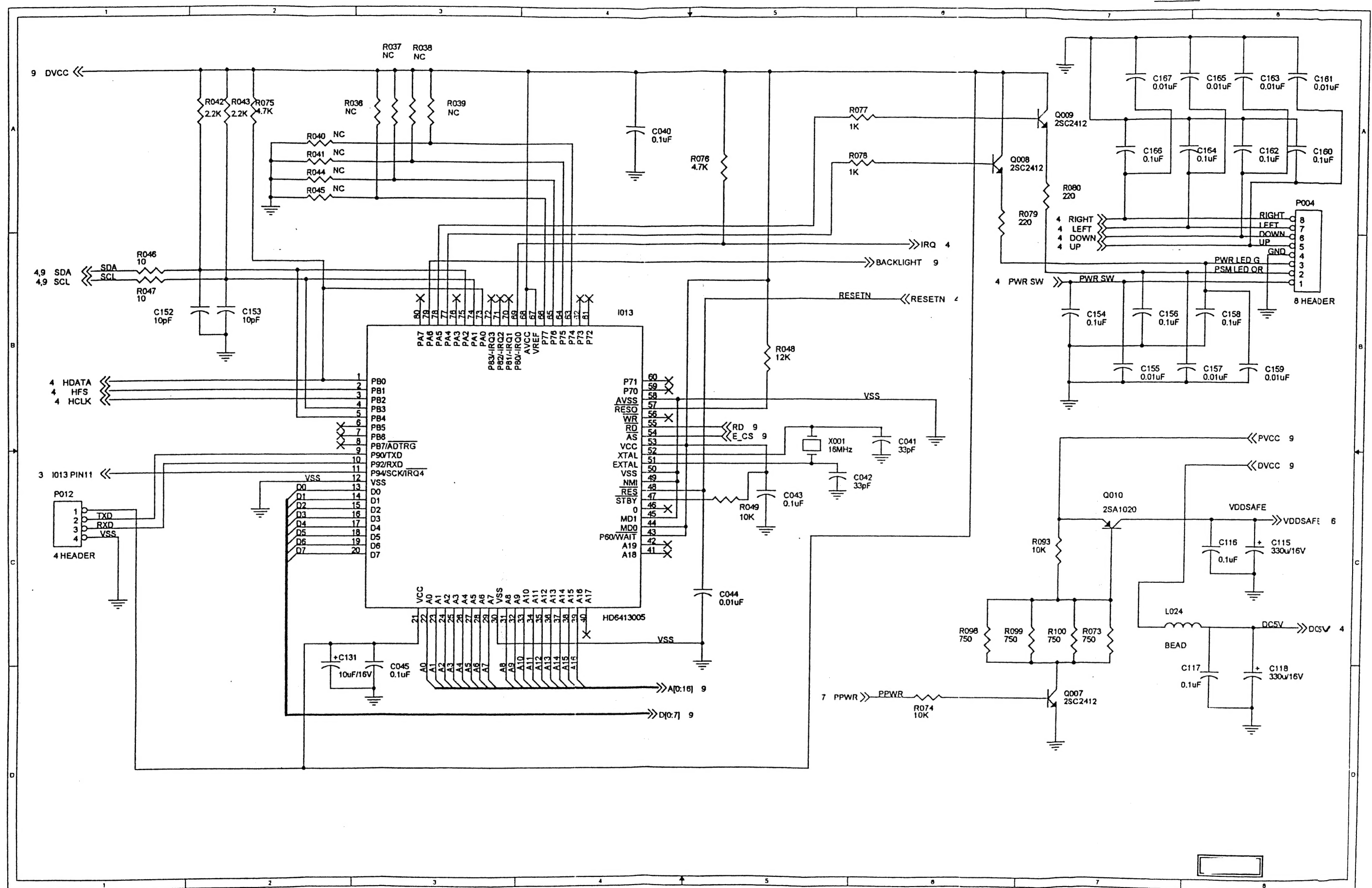
**Key Components and Connections:**

- TP1 PAD:** Test point 1, connected to the DVOO pin of the B1208-CR7BC.
- TP2 PAD:** Test point 2, connected to the SVOO pin of the B1208-CR7BC.
- TP3 PAD:** Test point 3, connected to the PLL\_SVOO pin of the B1208-CR7BC.
- TP4 PAD:** Test point 4, connected to the A\_TEST pin of the B1208-ADC.
- Power Supplies:** The diagram shows connections for DVCC, SVCC, and VCC, along with various decoupling capacitors (C034, C035, C036, C130, C180, C181, C182, C183, C184, C185, C186).
- Signal Paths:** The diagram shows connections for various signals including DAC\_DGND, DAC\_DVDD, PLL\_DVDD, PLL\_DGND, PLL\_SGND, PLL\_SVOO, ADC\_VDD, ADC\_GND, and ADC\_BGND.
- Test Points:** The diagram includes test points for various signals, including DAC\_DGND, DAC\_DVDD, PLL\_DVDD, PLL\_DGND, PLL\_SGND, PLL\_SVOO, ADC\_VDD, ADC\_GND, and ADC\_BGND.

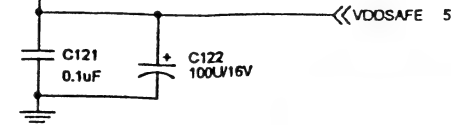
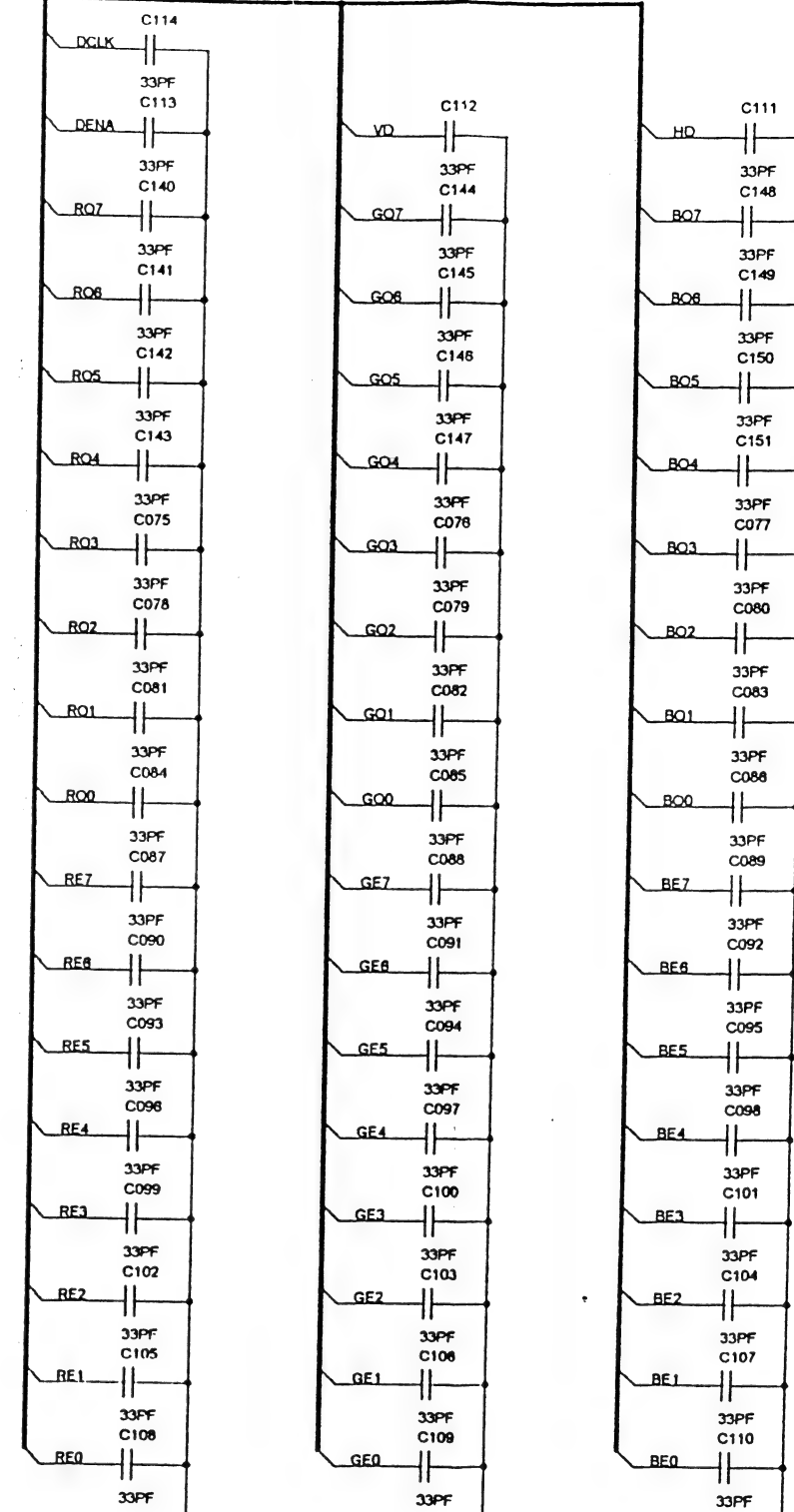
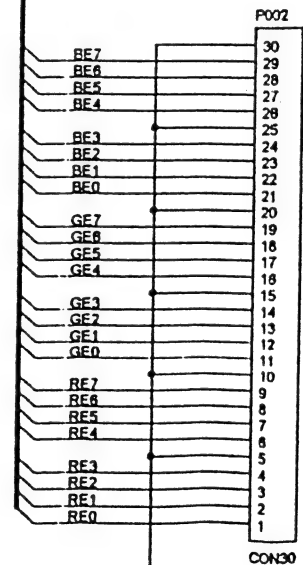
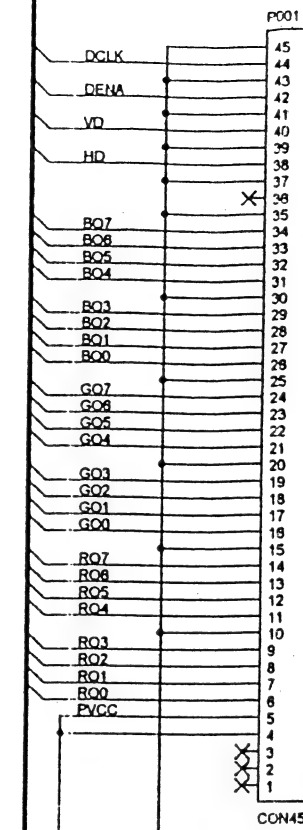
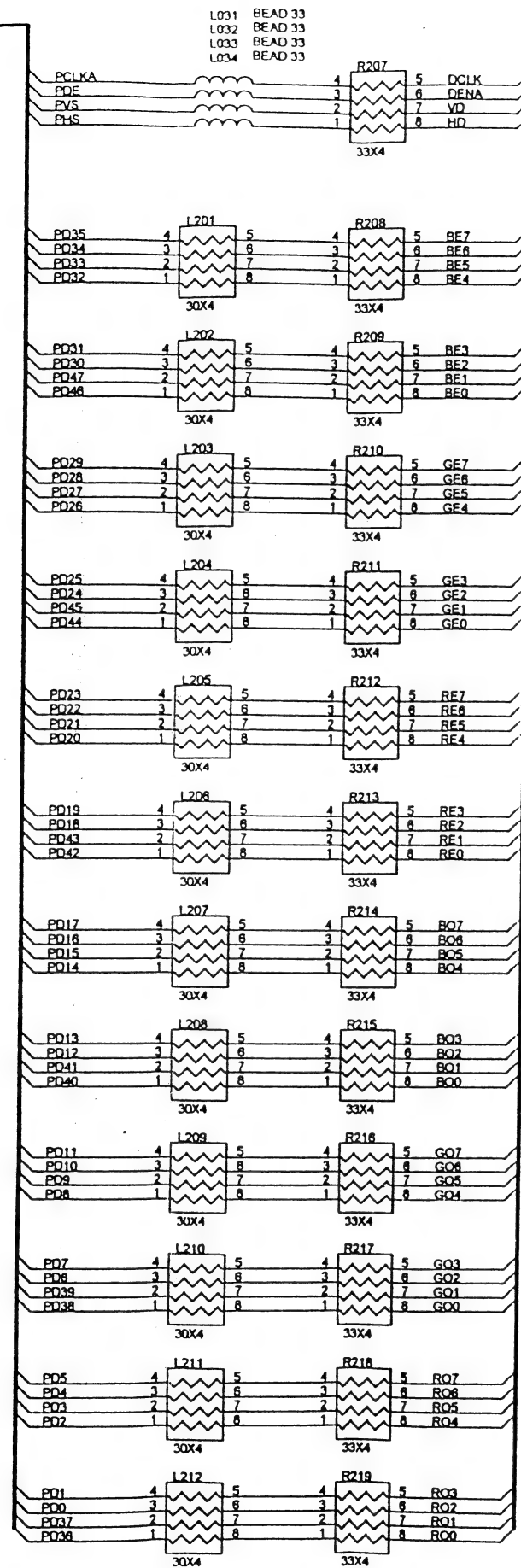
The schematic is a detailed representation of the hardware, showing the internal structure of the components and their interconnections. It is a critical tool for understanding the system's architecture and for troubleshooting issues.





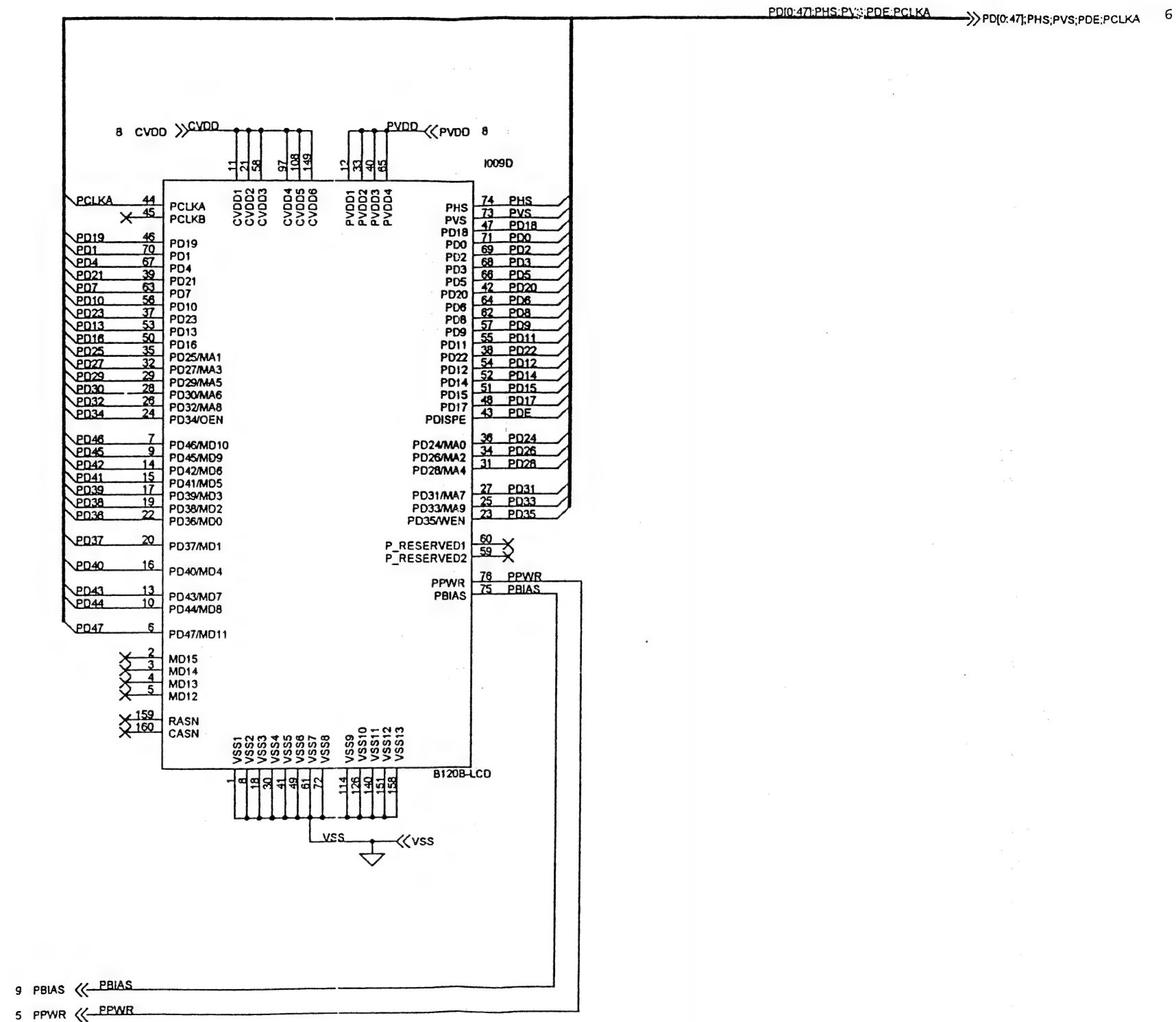


7  
PD[0:47], PHS, PVS, PDE, PCLKA



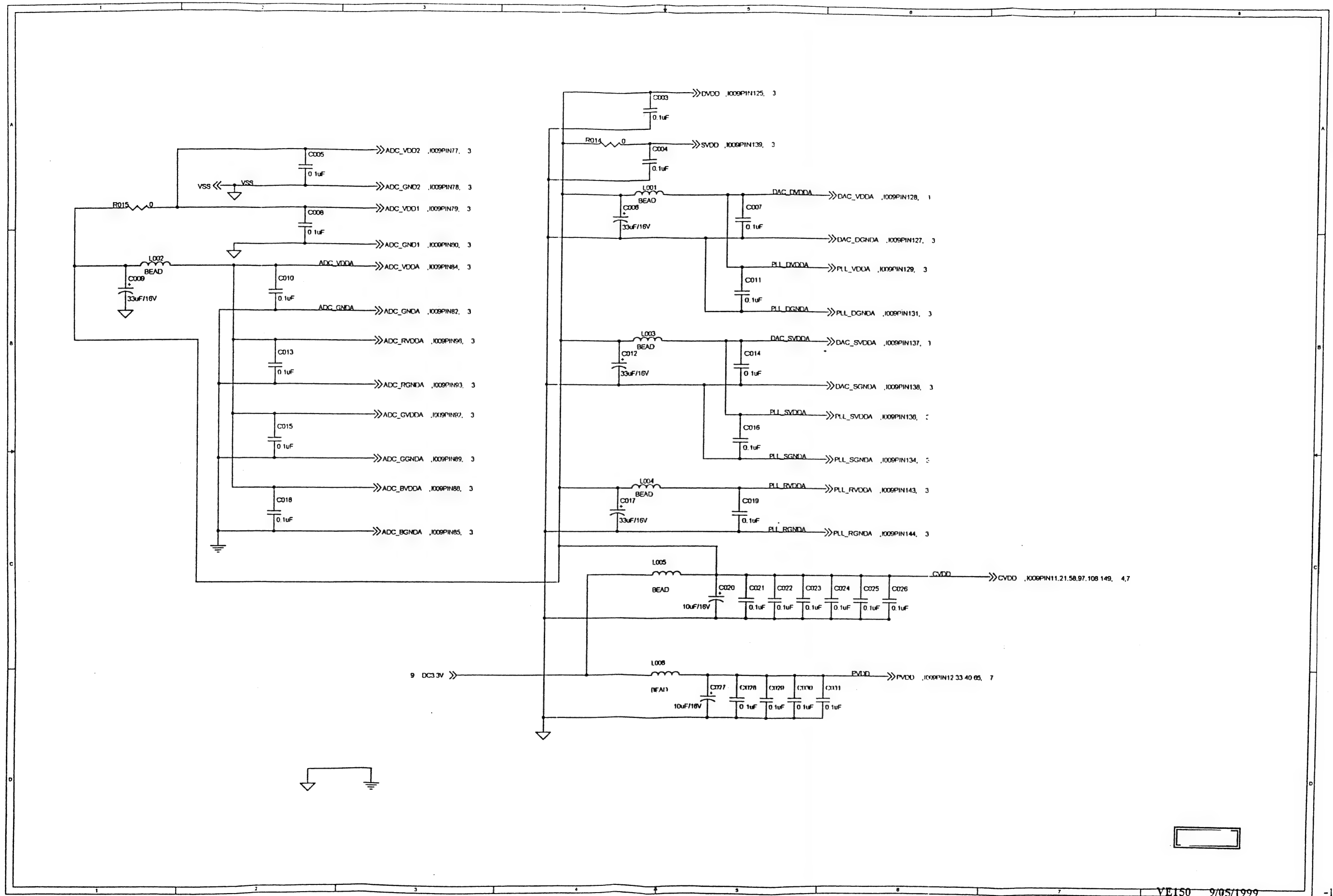
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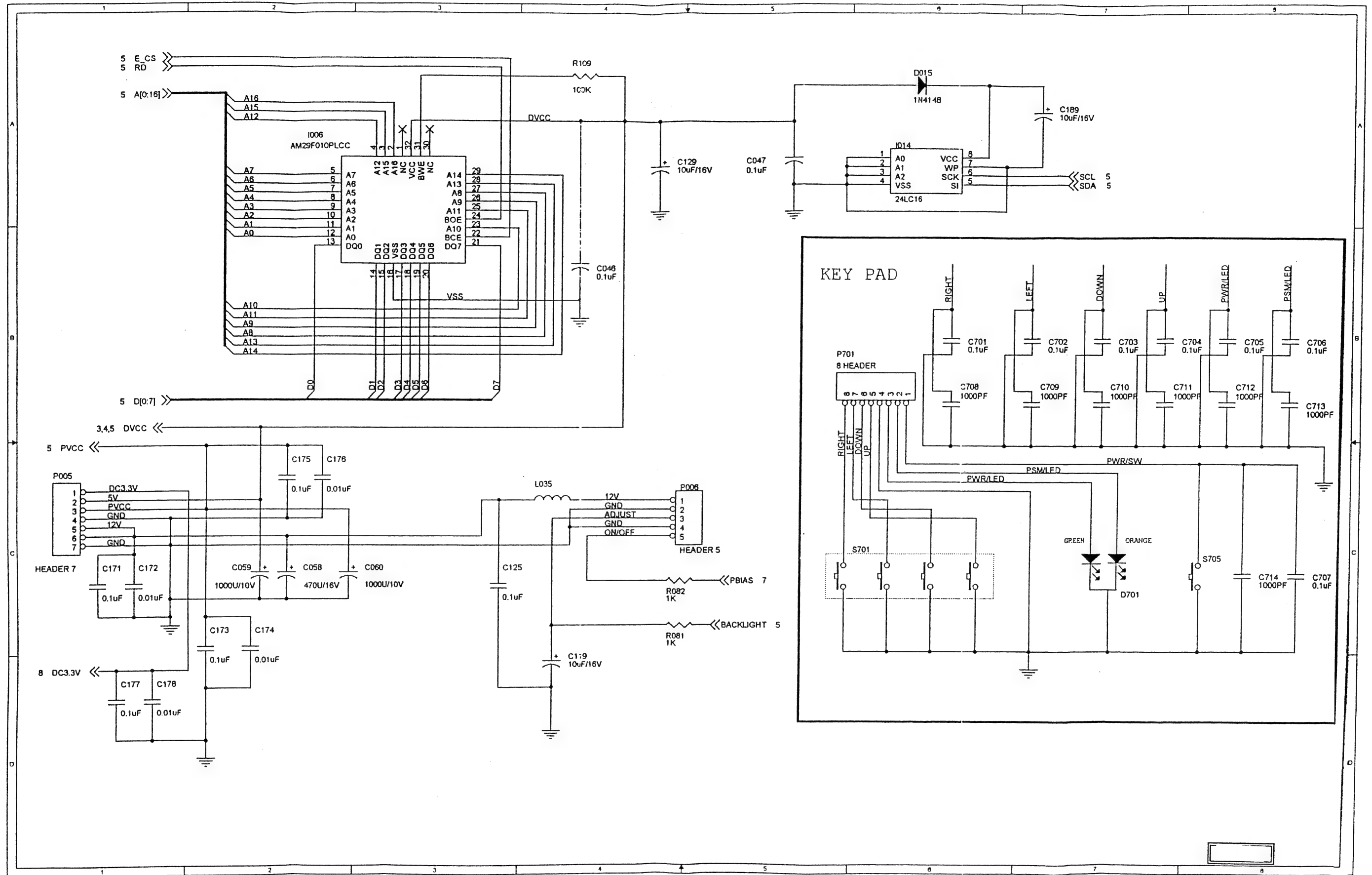
# B120B Panel Interface



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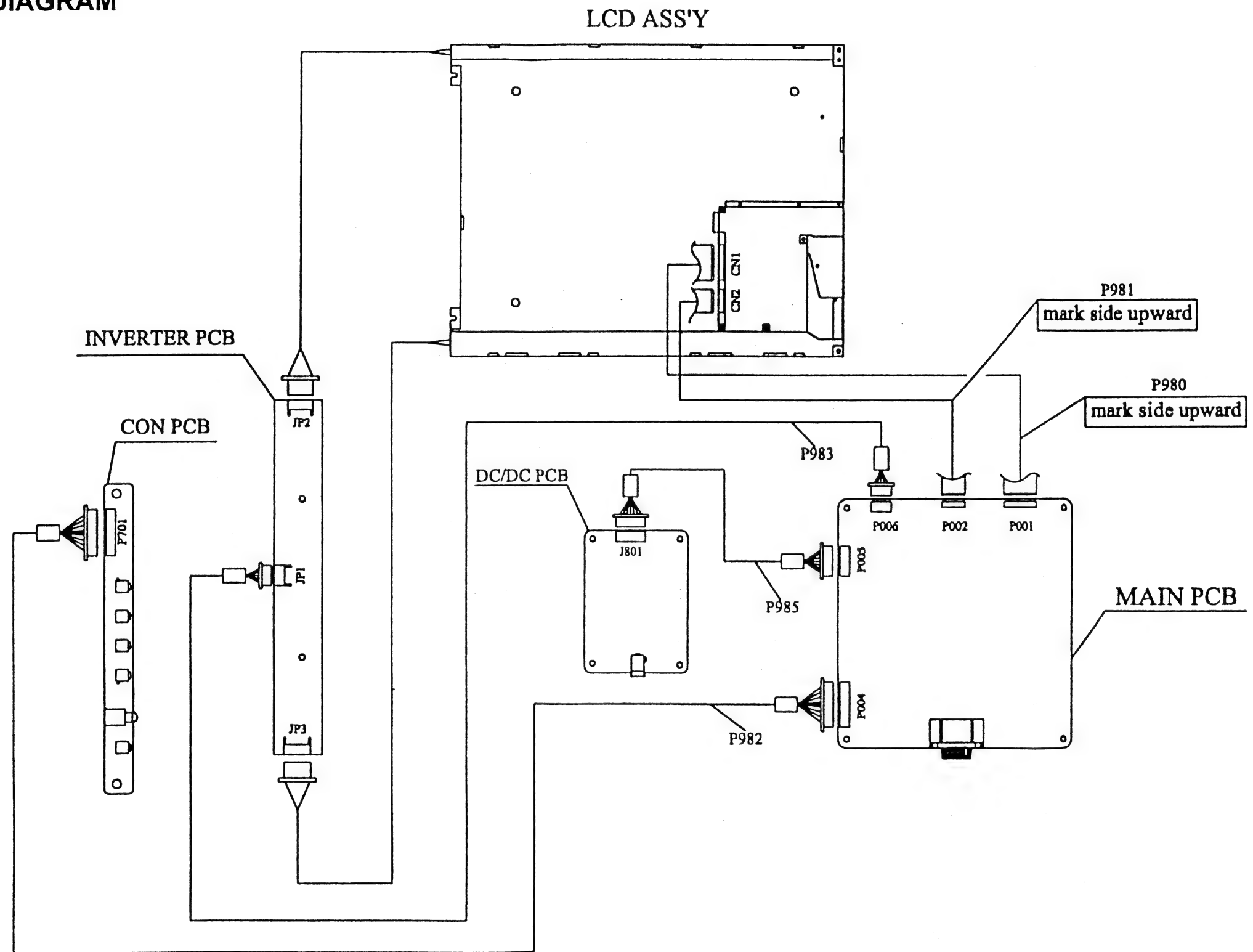






## 7. WIRING DIAGRAM

(VE150)

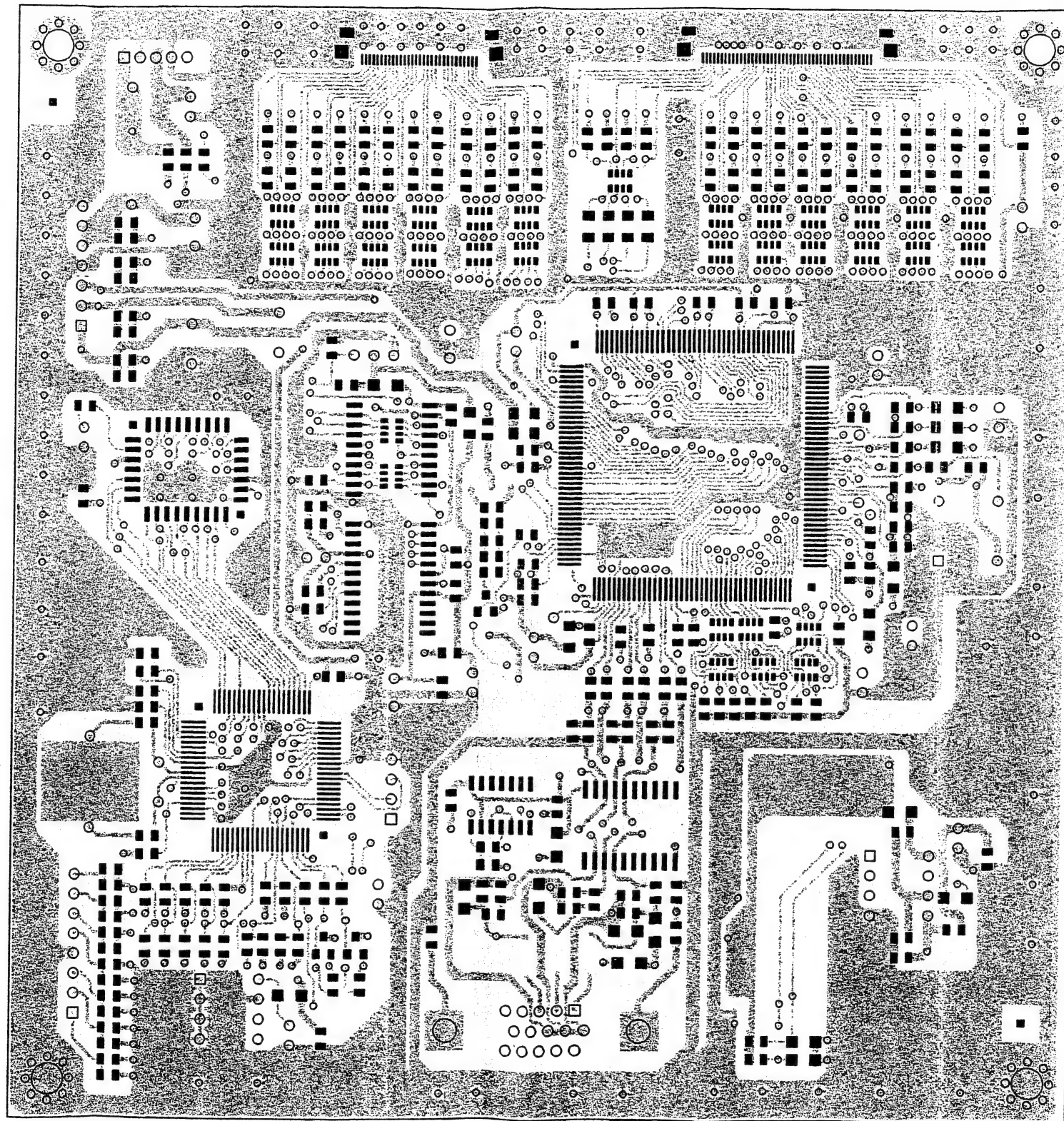




### 8.1. MAIN PCB TOP VIEW

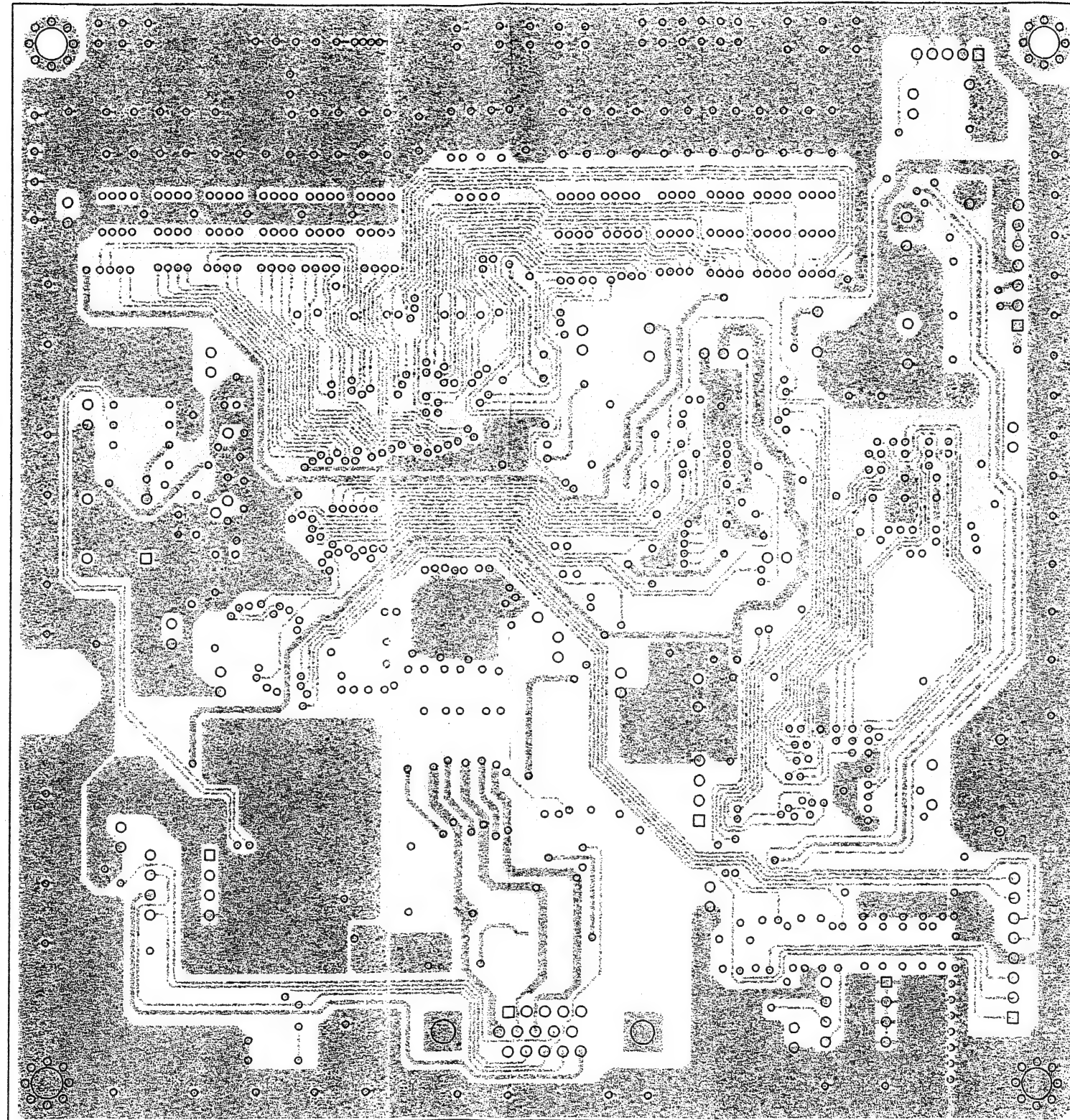






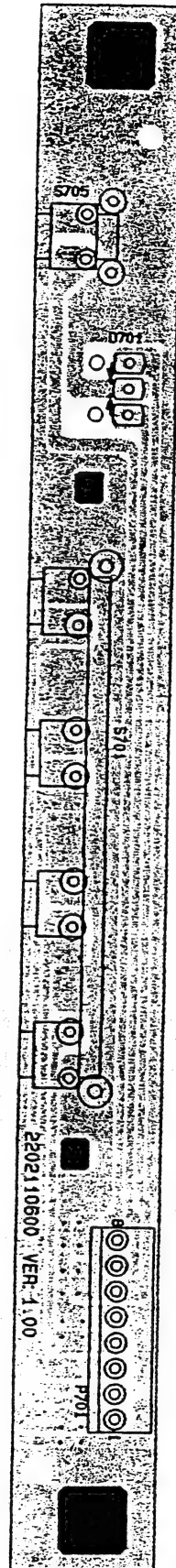


8.2. MAIN PCB BOTTOM VIEW





8.3. CON PCB TOP VIEW

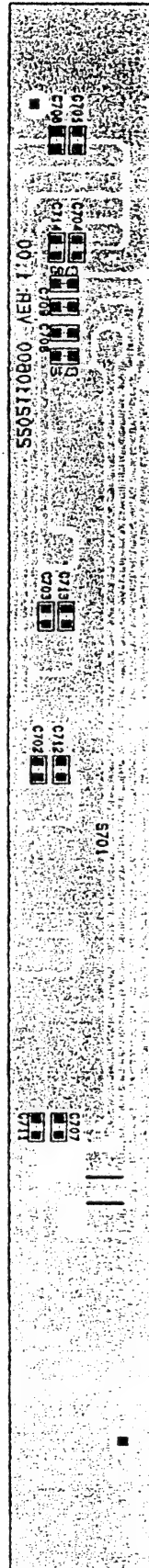


-21-

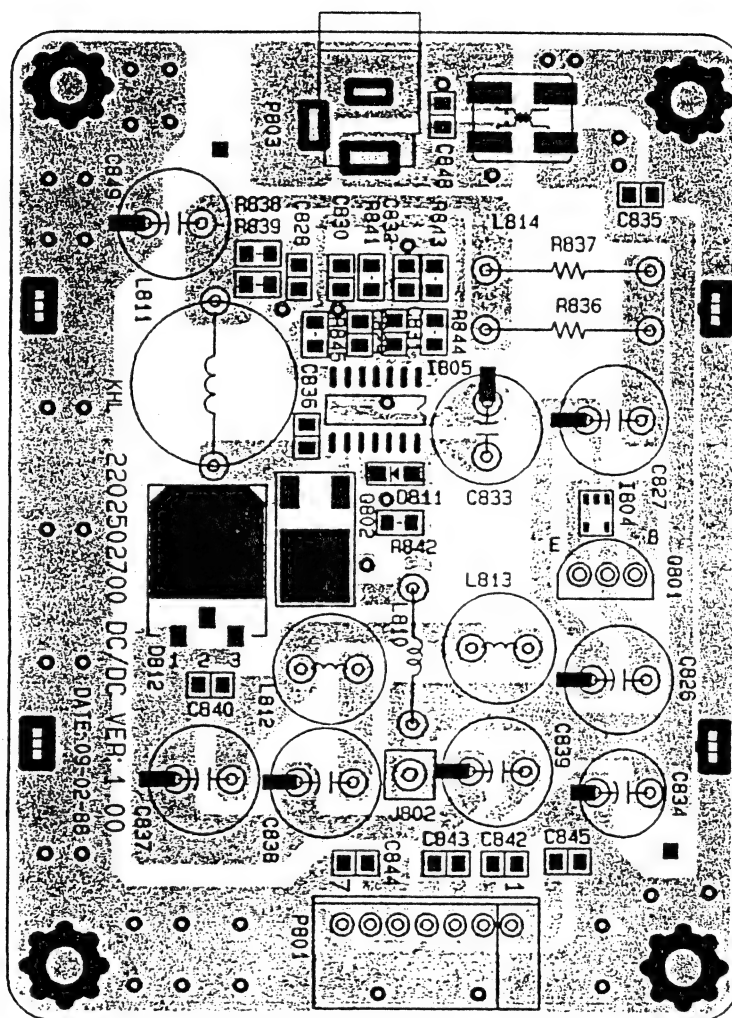
VE150

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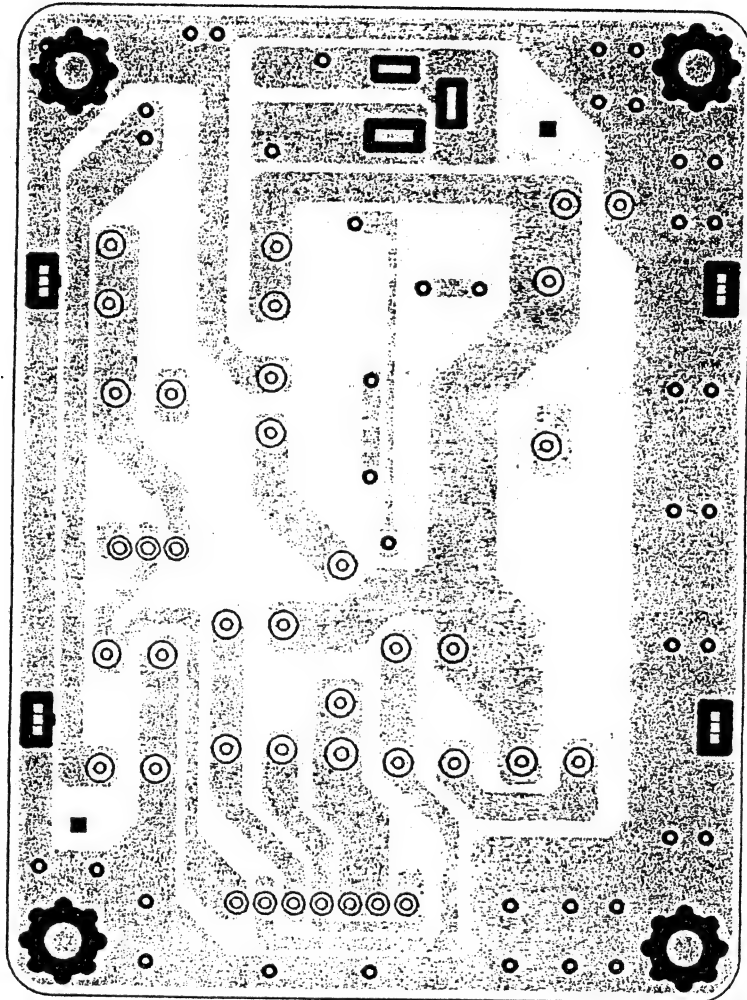
#### 8.4. CON PCB BOTTOM VIEW



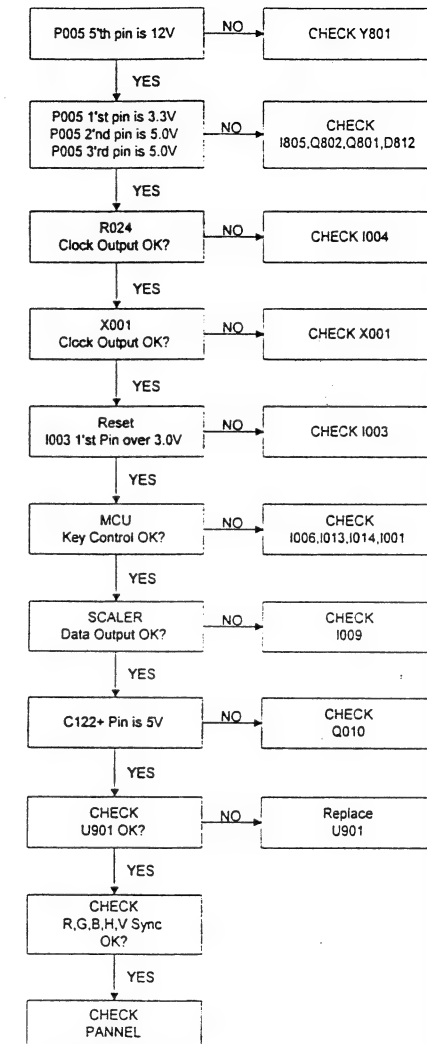
## 8.5. DC/DC PCB TOP VIEW



### 8.6. DC/DC PCB BOTTOM VIEW



## 9. TROUBLE SHOOTING FLOW CHART



## 10. ADJUSTMENT

### 10.1. ADJUSTMENT CONDITIONS AND PRECAUTIONS

1. Approximately 30 minutes should be allowed for warm up before proceeding.
2. Adjustments should be undertaken only on those necessary elements since most of them have been carefully preset at the factory.
3. ESD protection is needed before adjustment.

### 10.2. MAIN ADJUSTMENTS

NO.	FUNCTION	DESIGNATION
1.	GEOMETRY	FUNCTION KEY
2.	WHITE BALANCE	FUNCTION KEY

### 10.3. ALIGNMENT PROCEDURES

#### Adjustment Conditions and Precautions:

- (A). Power supply voltage:  
AC 110/120V  $\pm 10\%$  60 Hz  $\pm 5\%$ , AC 220/240V  $\pm 10\%$  50 Hz  $\pm 5\%$ .
- (B). Warm up time:  
The display must be power ON for at least 30 minutes at full white pattern before starting alignments. This is especially critical in color temperature and white balance adjustments.
- (C). Signals: reference the front detail specifications and timing table.  
Video : reference the front detail specifications.

#### 1. Geometry:

- (a). Set preset timing same as 3.2 timing chart and cross - hatch pattern.
- (b). Power turn off, press "▼" and "[2]" key and turn on power the same time. After power LED is on, release "▼" and "[2]" key, Then change mode one by one. One mode stand about 10 sec, When OSD "STORING" disappear then you can change mode. It will auto - adjustment.
- (c). Check all mode have auto - adjustment and save.

#### 2. Adjustment of White Balance:

##### Presetting:

- (a). Warm up time must be over 30 minutes.
- (b). Set 48KHZ 1024x768 at 16 grays pattern.
- (c). Set up CA110 color analyzer at the center of screen and along a perpendicular to the screen at 20cm from the display.
- (d). Power turn off, press "▼" and "[2]" key and turn on power the same time. After power LED is on, release "▼" and "[2]" key, Then press "[1]" key go to factory setting mode.

OSD type as follows:

1:- 2:+ ▲▼: SEL	NOW	DEF
⚙ BACK-LIGHT	100	
① FS-ADC	+5	68
RED FS	—	145 145
GREEN FS	—	137 137
BLUE FS	—	140 140
ZS-ADC+ -10		120
ZS-RED		120
ZS-GREEN		120
ZS-BLUE		
AUTO BALANCE		
CHANGE MENU		
FACTORY-ADJ	VER-1.03	

(1)

1:- 2:+ ▲▼: SEL	NOW	DEF
OFFSET-ADC + - 10	-1	
OFFSET-RED	5	
OFFSET-GREEN	3	
OFFSET-BLUE	-1	
R-GAMMA	5	5
G-GAMMA	5	5
B-GAMMA	5	5
EXIT SAVE + EXIT		
INIT EEPROM		
MAIN MENU		
FACTORY-ADJ	VER-1.03	

(2)

- (e). Press "▼" or "▲" key move cursor to "AUTO BALANCE" then press "[2]" key the monitor will execute auto white balance when the number of "RED FS" ect. is changing the auto white balance is OK.
- (f). Press "▼" or "▲" key move cursor to "CHANGE MENU" then press "[2]" key the OSD is change to (2) type menu, Press "▼" or "▲" key move cursor to "EXIT SAVE +EXIT" and press "[2]" key, it will save data and exit OSD.
- (g). Change pattern to full white pattern to check color temperature  
 $x = 0.300 \pm 0.03$   
 $y = 0.320 \pm 0.03$   
 $Y > 180 \text{ cd/m}^2$



## 11. ELECTRICAL PARTS LIST

When you place a parts order, be sure to indicate the following data on the order:

- Location No.
- Parts No.
- Description

LOC NO.	SOURCE	PART NO.	DESCRIPTION	SPECIFICATION	REMARK
<b>MAIN P.C.BOARD</b>					
C001		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C002		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C003		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C004		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C005		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C006		2337333601	CAP,MINI ELE 85°C	CE04W 33.000UF 16V M	
C007		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C008		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C009		2337333601	CAP,MINI ELE 85°C	CE04W 33.000UF 16V M	
C010		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C011		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C012		2337333601	CAP,MINI ELE 85°C	CE04W 33.000UF 16V M	
C013		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C014		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C015		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C016		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C017		2337333601	CAP,MINI ELE 85°C	CE04W 33.000UF 16V M	
C018		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C019		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C020		2337310601	CAP,MINI ELE 85°C	CE04W 10.000UF 16V M	
C021		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C022		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C023		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C024		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C025		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C026		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C027		2337310601	CAP,MINI ELE 85°C	CE04W 10.000UF 16V M	
C028		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C029		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C030		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C031		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C032		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C033		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C034		2347133196	CAP,CHIP 125°C	2012X7R 330.000PF 50V K	
C035		2347133196	CAP,CHIP 125°C	2012X7R 330.000PF 50V K	
C036		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C040		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C041		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C042		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C043		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C044		2347410396	CAP,CHIP 85°C	2012Y5V 0.010UF 50V Z	
C045		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C046		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C047		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C058		2337347701	CAP,MINI ELE 85°C	CE04W 470.000UF 16V M	
C059		2330100101	CAP,MINI ELE	CE 1000u/10V 10X5PX12.5L SR	
C060		2330100101	CAP,MINI ELE	CE 1000u/10V 10X5PX12.5L SR	
C073		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C076		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C077		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C078		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C079		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C080		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C081		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	

LOC NO.	SOURCE	PART NO.	DESCRIPTION	SPECIFICATION	REMARK
C082		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C083		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C084		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C085		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C086		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C087		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C088		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C089		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C090		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C091		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C092		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C093		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C094		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C095		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C096		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C097		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C098		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C099		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C100		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C101		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C102		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C103		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C104		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C105		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C106		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C107		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C108		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C109		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C110		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C111		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C112		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C113		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C114		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C115		2337333701	CAP,MINI ELE 85°C	CE04W 330.000UF 16V M	
C116		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C117		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C118		2337333701	CAP,MINI ELE 85°C	CE04W 330.000UF 16V M	
C119		2337310601	CAP,MINI ELE 85°C	CE04W 10.000UF 16V M	
C121		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C122		2337310701	CAP,MINI ELE 85°C	CE04W 100.000UF 16V M	
C123		2342110196	CAP,CHIP 125°C	2012COG 100.000PF 50V J	
C124		2342110196	CAP,CHIP 125°C	2012COG 100.000PF 50V J	
C125		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C127		2337310601	CAP,MINI ELE 85°C	CE04W 10.000UF 16V M	
C128		2337310601	CAP,MINI ELE 85°C	CE04W 10.000UF 16V M	
C129		2337310601	CAP,MINI ELE 85°C	CE04W 10.000UF 16V M	
C130		2337310601	CAP,MINI ELE 85°C	CE04W 10.000UF 16V M	
C131		2337310601	CAP,MINI ELE 85°C	CE04W 10.000UF 16V M	
C140		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C141		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C142		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C143		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C144		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C145		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C146		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C147		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C148		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C149		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C150		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C151		2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J	
C152		2342110096	CAP,CHIP 125°C	2012COG 10.000PF 50V J	
C153		2342110096	CAP,CHIP 125°C	2012COG 10.000PF 50V J	
C154		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C155		2347410396	CAP,CHIP 85°C	2012Y5V 0.010UF 50V Z	

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LOC NO.	SOURCE	PART NO.	DESCRIPTION	SPECIFICATION	REMARK
C156		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C157		2347410396	CAP,CHIP 85°C	2012Y5V 0.010UF 50V Z	
C158		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C159		2347410396	CAP,CHIP 85°C	2012Y5V 0.010UF 50V Z	
C160		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C161		2347410396	CAP,CHIP 85°C	2012Y5V 0.010UF 50V Z	
C162		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C163		2347410396	CAP,CHIP 85°C	2012Y5V 0.010UF 50V Z	
C164		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C165		2347410396	CAP,CHIP 85°C	2012Y5V 0.010UF 50V Z	
C166		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C167		2347410396	CAP,CHIP 85°C	2012Y5V 0.010UF 50V Z	
C171		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C172		2347410396	CAP,CHIP 85°C	2012Y5V 0.010UF 50V Z	
C173		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C174		2347410396	CAP,CHIP 85°C	2012Y5V 0.010UF 50V Z	
C175		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C176		2347410396	CAP,CHIP 85°C	2012Y5V 0.010UF 50V Z	
C177		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C178		2347410396	CAP,CHIP 85°C	2012Y5V 0.010UF 50V Z	
C179		2253300096	RES,CHIP 1/8	RC 1/8W 0.00 J	T2012
C180		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C181		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C182		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C183		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C184		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C185		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C186		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C187		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C188		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
C189		2337310601	CAP,MINI ELE 85°C	CE04W 10.000UF 16V M	
C190		2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z	
D002		2364500396	DIODE,ZENER SMD	RLZ5.6B 5.45-5.73V 0.5W ROHM	
D003		2364500396	DIODE,ZENER SMD	RLZ5.6B 5.45-5.73V 0.5W ROHM	
D006		2364600196	DIODE,SWITCH SMD	LL4148 3.5X1.5 φ TEMIC GS08	
D007		2364600196	DIODE,SWITCH SMD	LL4148 3.5X1.5 φ TEMIC GS08	
D008		2364600196	DIODE,SWITCH SMD	LL4148 3.5X1.5 φ TEMIC GS08	
D010		2364600196	DIODE,SWITCH SMD	LL4148 3.5X1.5 φ TEMIC GS08	
D011		2364600196	DIODE,SWITCH SMD	LL4148 3.5X1.5 φ TEMIC GS08	
D012		2364600196	DIODE,SWITCH SMD	LL4148 3.5X1.5 φ TEMIC GS08	
D013		2364600196	DIODE,SWITCH SMD	LL4148 3.5X1.5 φ TEMIC GS08	
D014		2364600196	DIODE,SWITCH SMD	LL4148 3.5X1.5 φ TEMIC GS08	
D015		2364600196	DIODE,SWITCH SMD	LL4148 3.5X1.5 φ TEMIC GS08	
I001		2365905196	IC,DIGITAL SMD	MC141585DW MOTOROLA S016	
I003		2365322291	IC,LINEAR	DS1813-10 DALLAS	
I004		2369103301	XTAL,OSC	XTAL 50.000MHZ H/S	
I006		2365905396	IC,DIGITAL SMD	W29EE011P-15 WINBOND SOP32	
I009		2365905396	IC,DIGITAL SMD	BRIDGE-120 PARADISE PQFP160	
I012		2365412600	IC,DIGITAL	24LC21A/P MICROCHIP	
I013		2365904996	IC,DIGITAL SMD	HD6413005F16 HITACHI QFP-80A	
I014		2365316200	IC,LINEAR	24LC16B MICROCHI	
I018		2365905296	IC,DIGITAL SMD	QS3245S0 PROSPECT S020	
I019	RA	2365900596	IC,DIGITAL SMD	74HCT86DT PHILIPS S014	
I019	RB	2365901896	IC,DIGITAL SMD	CD74HCT86 HARRIS S014	
L001		2379620196	BEAD,HI-IMPEDANCE	3216MZ 200.000HM I<300MA	
L002		2379620196	BEAD,HI-IMPEDANCE	3216MZ 200.000HM I<300MA	
L003		2379620196	BEAD,HI-IMPEDANCE	3216MZ 200.000HM I<300MA	
L004		2379620196	BEAD,HI-IMPEDANCE	3216MZ 200.000HM I<300MA	
L005		2379620196	BEAD,HI-IMPEDANCE	3216MZ 200.000HM I<300MA	
L006		2379620196	BEAD,HI-IMPEDANCE	3216MZ 200.000HM I<300MA	
L007		2379620196	BEAD,HI-IMPEDANCE	3216MZ 200.000HM I<300MA	
L008		2379620196	BEAD,HI-IMPEDANCE	3216MZ 200.000HM I<300MA	
L009		2233400095	RES,CBN 1/4 S	RD 1/4WS 0.00 J	
L010		2233400095	RES,CBN 1/4 S	RD 1/4WS 0.00 J	

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LOC NO.	SOURCE	PART NO.	DESCRIPTION	SPECIFICATION	REMARK
L011		2233400095	RES,CBN 1/4 S	RD 1/4WS 0.00 J	
L024		2379620196	BEAD,HI-IMPEDANCE	3216MZ 200.000HM I<300MA	
L031		2379626096	BEAD,HI-IMPEDANCE	3216MZ 26.000HM I<300MA	
L032		2379626096	BEAD,HI-IMPEDANCE	3216MZ 26.000HM I<300MA	
L033		2379626096	BEAD,HI-IMPEDANCE	3216MZ 26.000HM I<300MA	
L034		2379626096	BEAD,HI-IMPEDANCE	3216MZ 26.000HM I<300MA	
L035		2379101495	FERRITE CORE	3.5X9X0.8	
L201		2376630008	BEAT ARRAY MULTI	3216MB 30.000HM I<200mA	
L202		2376630008	BEAT ARRAY MULTI	3216MB 30.000HM I<200mA	
L203		2376630008	BEAT ARRAY MULTI	3216MB 30.000HM I<200mA	
L204		2376630008	BEAT ARRAY MULTI	3216MB 30.000HM I<200mA	
L205		2376630008	BEAT ARRAY MULTI	3216MB 30.000HM I<200mA	
L206		2376630008	BEAT ARRAY MULTI	3216MB 30.000HM I<200mA	
L207		2376630008	BEAT ARRAY MULTI	3216MB 30.000HM I<200mA	
L208		2376630008	BEAT ARRAY MULTI	3216MB 30.000HM I<200mA	
L209		2376630008	BEAT ARRAY MULTI	3216MB 30.000HM I<200mA	
L210		2376630008	BEAT ARRAY MULTI	3216MB 30.000HM I<200mA	
L211		2376630008	BEAT ARRAY MULTI	3216MB 30.000HM I<200mA	
L212		2376630008	BEAT ARRAY MULTI	3216MB 30.000HM I<200mA	
P001	RA	2407630145	SOCKET,SMD	IL-FHR,S-HF*45 0.5*45P JAE	
P001	RB	2407630245	SOCKET,SMD	6240-45-ORSP 0.5*45P KYOCERA	
P002	RA	2407630130	SOCKET,SMD	IL-FHR,S-HF*30 0.5*30P JAE	
P002	RB	2407630230	SOCKET,SMD	6240-30-ORSP 0.5*30P KYOCERA	
P003	RA	2404381001	CONNECTOR	D-SUB 15P	
P003	RB	2407430300	SOCKET	D-SUB FEMALE 15PIN RIGHT(AMP)	
P004		2404301007	CONNECTOR	S8B-XH-A 8PIN JST	
P005		2404301006	CONNECTOR	S7B-XH-A 7PIN	
P006		2404301104	CONNECTOR	S5B-PH-K 5PIN JST	
P101		2407390132	SOCKET,IC	1.27mmX32PIN SMD PLCC	
P102		2407310108	SOCKET,IC	2.54mmX7.62 08PIN DIP D/L	
P103		2407310108	SOCKET,IC	2.54mmX7.62 08PIN DIP D/L	
Q007		2360300196	XISTOR,NPN R SMD	2SC2412KR ROHM SMT3	
Q008		2360300196	XISTOR,NPN R SMD	2SC2412KR ROHM SMT3	
Q009		2360300196	XISTOR,NPN R SMD	2SC2412KR ROHM SMT3	
Q010		2361111191	XISTOR,PNP R	2SA1020(Y) TOSHIBA	
R001		2253310296	RES,CHIP 1/8	RC 1/8W 1.00K J	T2012
R002		2253310296	RES,CHIP 1/8	RC 1/8W 1.00K J	T2012
R003		2253310296	RES,CHIP 1/8	RC 1/8W 1.00K J	T2012
R005		2253310096	RES,CHIP 1/8	RC 1/8W 10.00 J	T2012
R010		2253300096	RES,CHIP 1/8	RC 1/8W 0.00 J	T2012
R014		2253300096	RES,CHIP 1/8	RC 1/8W 0.00 J	T2012
R015		2253300096	RES,CHIP 1/8	RC 1/8W 0.00 J	T2012
R024		2253347096	RES,CHIP 1/8	RC 1/8W 47.00 J	T2012
R025		2253322296	RES,CHIP 1/8	RC 1/8W 2.20K J	T2012
R026		2253322296	RES,CHIP 1/8	RC 1/8W 2.20K J	T2012
R027		2253315196	RES,CHIP 1/8	RC 1/8W 150.00 J	T2012
R028		2253107506	RES,CHIP 1/8	RC 1/8 75.00 F	
R029		2253315196	RES,CHIP 1/8	RC 1/8W 150.00 J	T2012
R030		2253315196	RES,CHIP 1/8	RC 1/8W 150.00 J	T2012
R031		2253107506	RES,CHIP 1/8	RC 1/8 75.00 F	
R032		2253315196	RES,CHIP 1/8	RC 1/8W 150.00 J	T2012
R033		2253315196	RES,CHIP 1/8	RC 1/8W 150.00 J	T2012
R034		2253107506	RES,CHIP 1/8	RC 1/8 75.00 F	
R035		2253315196	RES,CHIP 1/8	RC 1/8W 150.00 J	T2012
R042		2253333296	RES,CHIP 1/8	RC 1/8W 3.30K J	T2012
R043		2253333296	RES,CHIP 1/8	RC 1/8W 3.30K J	T2012
R046		2253310096	RES,CHIP 1/8	RC 1/8W 10.00 J	T2012
R047		2253310096	RES,CHIP 1/8	RC 1/8W 10.00 J	T2012
R048		2253312396	RES,CHIP 1/8	RC 1/8W 12.00K J	T2012
R049		2253310396	RES,CHIP 1/8	RC 1/8W 10.00K J	T2012
R073		2253375196	RES,CHIP 1/8	RC 1/8W 750.00 J	T2012
R074		2253310396	RES,CHIP 1/8	RC 1/8W 10.00K J	T2012
R075		2253347296	RES,CHIP 1/8	RC 1/8W 4.70K J	T2012
R076		2253347296	RES,CHIP 1/8	RC 1/8W 4.70K J	T2012

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LOC NO.	SOURCE	PART NO.	DESCRIPTION	SPECIFICATION	REMARK
R077		2253310296	RES,CHIP 1/8	RC 1/8W 1.00K J	T2012
R078		2253310296	RES,CHIP 1/8	RC 1/8W 1.00K J	T2012
R079		2253322196	RES,CHIP 1/8	RC 1/8W 220.00 J	T2012
R080		2253322196	RES,CHIP 1/8	RC 1/8W 220.00 J	T2012
R081		2253310296	RES,CHIP 1/8	RC 1/8W 1.00K J	T2012
R082		2253310296	RES,CHIP 1/8	RC 1/8W 1.00K J	T2012
R083		2253310396	RES,CHIP 1/8	RC 1/8W 10.00K J	T2012
R093		2253310396	RES,CHIP 1/8	RC 1/8W 10.00K J	T2012
R095		2253300096	RES,CHIP 1/8	RC 1/8W 0.00 J	T2012
R096		2253300096	RES,CHIP 1/8	RC 1/8W 0.00 J	T2012
R098		2253375196	RES,CHIP 1/8	RC 1/8W 750.00 J	T2012
R099		2253375196	RES,CHIP 1/8	RC 1/8W 750.00 J	T2012
R100		2253375196	RES,CHIP 1/8	RC 1/8W 750.00 J	T2012
R101		2253310296	RES,CHIP 1/8	RC 1/8W 1.00K J	T2012
R102		2253347396	RES,CHIP 1/8	RC 1/8W 47.00K J	T2012
R103		2253347396	RES,CHIP 1/8	RC 1/8W 47.00K J	T2012
R104		2253347396	RES,CHIP 1/8	RC 1/8W 47.00K J	T2012
R105		2253347396	RES,CHIP 1/8	RC 1/8W 47.00K J	T2012
R106		2253347396	RES,CHIP 1/8	RC 1/8W 47.00K J	T2012
R107		2253347396	RES,CHIP 1/8	RC 1/8W 47.00K J	T2012
R109		2253310496	RES,CHIP 1/8	RC 1/8W 100.00K J	T2012
R201		2259247208	RES,CHIP NETWORKS	08P*04R 1/16W 4.70K J P=0.8	
R202		2259247208	RES,CHIP NETWORKS	08P*04R 1/16W 4.70K J P=0.8	
R203		2259247208	RES,CHIP NETWORKS	08P*04R 1/16W 4.70K J P=0.8	
R204		2259222308	RES,CHIP NETWORKS	08P*04R 1/16W 22.00K J P=0.8	
R205		2259222308	RES,CHIP NETWORKS	08P*04R 1/16W 22.00K J P=0.8	
R206		2259222308	RES,CHIP NETWORKS	08P*04R 1/16W 22.00K J P=0.8	
R207		2259233008	RES,CHIP NETWORKS	08P*04R 1/16W 33.00 J P=0.8	
R208		2259233008	RES,CHIP NETWORKS	08P*04R 1/16W 33.00 J P=0.8	
R209		2259233008	RES,CHIP NETWORKS	08P*04R 1/16W 33.00 J P=0.8	
R210		2259233008	RES,CHIP NETWORKS	08P*04R 1/16W 33.00 J P=0.8	
R211		2259233008	RES,CHIP NETWORKS	08P*04R 1/16W 33.00 J P=0.8	
R212		2259233008	RES,CHIP NETWORKS	08P*04R 1/16W 33.00 J P=0.8	
R213		2259233008	RES,CHIP NETWORKS	08P*04R 1/16W 33.00 J P=0.8	
R214		2259233008	RES,CHIP NETWORKS	08P*04R 1/16W 33.00 J P=0.8	
R215		2259233008	RES,CHIP NETWORKS	08P*04R 1/16W 33.00 J P=0.8	
R216		2259233008	RES,CHIP NETWORKS	08P*04R 1/16W 33.00 J P=0.8	
R217		2259233008	RES,CHIP NETWORKS	08P*04R 1/16W 33.00 J P=0.8	
R218		2259233008	RES,CHIP NETWORKS	08P*04R 1/16W 33.00 J P=0.8	
R219		2259233008	RES,CHIP NETWORKS	08P*04R 1/16W 33.00 J P=0.8	
R220		2259200008	RES,CHIP NETWORKS	08P*04R 1/16W 0000.00 J P=0.8	
R221		2259200008	RES,CHIP NETWORKS	08P*04R 1/16W 0000.00 J P=0.8	
U001		2202502500	PCB MULTILAYER	JT156E11 MAIN FR4*4 137*142	
X001		2369102800	XTAL,OSC	XTAL 16.000MHZ 30PPM 49/U	

## CON P.C.BOARD

C701	2346410496	CAP,CHIP 85°C	1608Y5V 0.100UF 50V Z
C702	2346410496	CAP,CHIP 85°C	1608Y5V 0.100UF 50V Z
C703	2346410496	CAP,CHIP 85°C	1608Y5V 0.100UF 50V Z
C704	2346410496	CAP,CHIP 85°C	1608Y5V 0.100UF 50V Z
C705	2346410496	CAP,CHIP 85°C	1608Y5V 0.100UF 50V Z
C706	2346410496	CAP,CHIP 85°C	1608Y5V 0.100UF 50V Z
C707	2346410496	CAP,CHIP 85°C	1608Y5V 0.100UF 50V Z
C708	2346110296	CAP,CHIP 125°C	1608X7R 1000.000PF 50V K
C709	2346110296	CAP,CHIP 125°C	1608X7R 1000.000PF 50V K
C710	2346110296	CAP,CHIP 125°C	1608X7R 1000.000PF 50V K
C711	2346110296	CAP,CHIP 125°C	1608X7R 1000.000PF 50V K
C712	2346110296	CAP,CHIP 125°C	1608X7R 1000.000PF 50V K
C713	2346110296	CAP,CHIP 125°C	1608X7R 1000.000PF 50V K
C714	2346110296	CAP,CHIP 125°C	1608X7R 1000.000PF 50V K
D701	2363703400	LED	KINGBRIGHT L-59YGW
P701	2404300007	CONNECTOR	B8B-XH-A 8PIN
S701	2403700800	SWITCH,PU-TC	SKHHLH1520-SV

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# VE150 Service Manual

LOC NO.	SOURCE	PART NO.	DESCRIPTION	SPECIFICATION	REMARK
S705		2403700600	SWITCH,PU-TC	SKHHLH1520-SV	
U701		2202110600	PC BOARD	JT156E1T* CON 94V0 155X14	

## DC/DC P.C.BOARD

C826	2335210812	CAP,MINI ELE 105°C	CE04W 1000.000UF 10V M
C827	2335210812	CAP,MINI ELE 105°C	CE04W 1000.000UF 10V M
C829	2342133096	CAP,CHIP 125°C	2012COG 33.000PF 50V J
C830	2347410396	CAP,CHIP 85°C	2012Y5V 0.010UF 50V Z
C831	2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z
C832	2347410296	CAP,CHIP 85°C	2012Y5V 1000.000PF 50V Z
C833	2333347701	CAP,MINI ELE 105°C	CE04W 470.000UF 16V M
C834	2333333701	CAP,MINI ELE 105°C	CE04W 330.000UF 16V M
C835	2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z
C836	2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z
C837	2335210812	CAP,MINI ELE 105°C	CE04W 1000.000UF 10V M
C838	2335210812	CAP,MINI ELE 105°C	CE04W 1000.000UF 10V M
C839	2335210812	CAP,MINI ELE 105°C	CE04W 1000.000UF 10V M
C840	2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z
C842	2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z
C843	2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z
C844	2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z
C845	2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z
C848	2347410496	CAP,CHIP 85°C	2012Y5V 0.100UF 50V Z
C849	2335210812	CAP,MINI ELE 105°C	CE04W 1000.000UF 10V M
D811	2364600196	DIODE,SWITCH SMD	LL4148 3.5X1.5φ TEMIC GS08
D812	2364200796	DIODE,RECT(SMD)	C10T04Q IR
I804	2365905096	IC,DIGITAL SMD	S816A3JAMC SEIKO SOT23-5
I805	2365800196	IC,LINEAR(SMD)	HIP6013CB HARRIS SO-14
L810	2379101495	FERRITE CORE	3.5X9X0.8
L811	23711110800	COIL,CHOKE	JT156E1 0.8*15.5T 10uH
L812	23711131000	COIL,CHOKE	JD156G 15UF 21.5T REF
L813	23711131000	COIL,CHOKE	JD156G 15UF 21.5T REF
L814	2370100196	COIL,CHOKE SMD	9.0*8.0*5.2 500/100M 5.0A
P801	2404301006	CONNECTOR	S7B-XH-A 7PIN
P803	2409200100	JACK,DC POWER	DJ-0702-025 2.5φ JYE TA1
Q801	2361111191	XISTOR.PNP R	2SA1020(Y) TOSHIBA
Q802	2360606296	FET,N-CH(SMD)	HUF76107D3S HARRIS T0252AA
R836	2235468903	RES.MTL 1	RS 1W 6.80 J
R837	2235468903	RES.MTL 1	RS 1W 6.80 J
R839	2251330016	RES,CHIP 1/8	RC 1/8 3.00K F
R841	2253315396	RES,CHIP 1/8	RC 1/8W 15.00K J T2012
R842	2253310396	RES,CHIP 1/8	RC 1/8W 10.00K J T2012
R843	2253327296	RES,CHIP 1/8	RC 1/8W 2.70K J T2012
R845	2251310016	RES,CHIP 1/8	RC 1/8 1.00K F
U802	2202502700	PCB MULTILAYER	JT156E1 DC/DC FR4*2 90*66

## OTHERS

Y801	2414101700	AC ADAPTER	AC110/220V DC12V 50W SYN
P951	2427130014	POWER CORD	H05VV-F3*0.75 VDE WALL 1.83M
P952	2427130003	POWER CORD	SVT 18/3C IVORY 1.83M
P961	2427501085	I/O CABLE	D-15M*2 VIEWSONIC 1.83M LCD
P980	2420325001	FCC CABLE	250L*23W*0.05T 0.3W*0.5P*45N
P981	2420325002	FCC CABLE	250L*15.5W*0.05T 0.3W*0.5P*30N
P982	2427412514	WIRE HARNESS	JST XHP8P*2 2464#24*8C 350L
P983	2427412515	WIRE HARNESS	JST PHR8P*2 2464#24*6C 300L
P984	2427307013	LUG W/WIRE	3.2φ RING*2 1007#18 BK 75L
P985	2427412513	WIRE HARNESS	JST XHP-7P 2464 7C 160L
U901	2200500900	PC BOARD ASY SMD	INVERTER CDA-039F CHI SAM
U901	2200501000	PC BOARD ASY SMD	INVERTER L0020 SAMPO
V901	2212000800	LCD ASSY	CLAA150XA03(v15) CPT

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9/05/1999

# ViewSonic® Corporation

381 Brea Canyon Road • Walnut, CA 91789 • Tel: (909) 444-8727 • Fax: (909) 444-8654



## Service Bulletin

SB # VE150B\_SB\_002

To : Authorized Service Providers	Issue Date: June 8, 2000	ECO # : 326 (new) -2
Model # : VE150B	Cut-in S/N, S/N Range, or Date: Final phase out of Sampo inverter board used in production GU01600001.	
Subject: Backlight Inverter Board (Sampo) Reliability Issue.		

### Purpose:

To resolve problem with field failures of the backlight inverter board due to component quality of the transformers (PT1 and PT2) utilized in the Sampo inverter design.

### Service Disposition:

- ☐ Recall.
- ☐ Unit under service and service inventory.
- ☐ Unit under service only.
- ☒ Technician judgement for unit under service (symptomatic).

### Change(s)/Countermeasure(s):

The Sampo inverter may still be used but only if "YST" marking is indicated on the transformer housing under the safety label. The preferred inverter board will be Chi-Sam brand.

Part Location	Part Description	Part Number	Repair Action	Comment	Failure Code
PT1, PT2	Sampo backlight inverter board.	B-SB-0221-0236	Replace defective inverter board with new one.	Limited supply remaining. Use Sampo boards containing "YST" marked transformers only.	VZK
PT1, PT2	Chi-Sam backlight inverter board.	B-SB-0221-0203	Replace defective inverter board with new one.	Preferred board to use.	VZK

See photos on next page to see the differences between the two inverter boards used for this model.

Please contact the Quality Assurance Department at (909) 444-8727 for further information.

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## Service Bulletin

SB # VE150B\_SB\_002



Figure 1.  
Sampo Backlight Inverter Board



Figure 2.  
BXT – Transformer with reliability problem.



Figure 3.  
YST – Known reliable transformer.

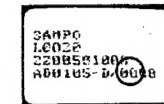


Figure 4.  
All new Sampo backlight inverter boards produced in year 2000 utilize "YST" transformer.

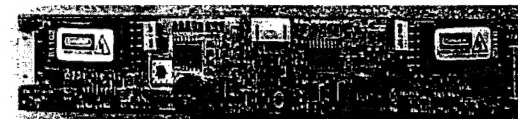


Figure 5.  
Chi-Sam Backlight Inverter Board

Please contact the Quality Assurance Department at (909) 444-8727 for further information.

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## Service Bulletin

SB # VE150B\_SB\_001

To : Authorized Service Providers	Issue Date: May 31, 2000	ECO # :
Model # : VE150B	Cut-in S/N, S/N Range, or Date: All units affected.	
Subject: OSD "always on" condition.		

### Purpose:

To resolve issue with solder fractures with the capacitors on the control PCB.

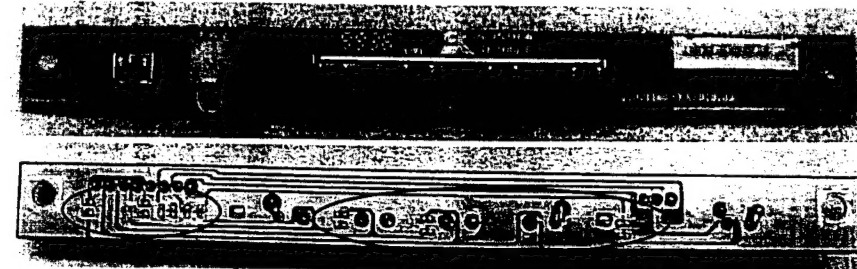
### Service Disposition:

- ☐ Recall.
- ☒ Unit under service and service inventory.
- ☐ Unit under service only.
- ☐ Technician judgement for unit under service (symptomatic).

### Change(s)/Countermeasure(s):

Part Location	Part Description	Part Number	Repair Action	Comment	Failure Code
C 701 thru C714	0.1µF 50V Z chip capacitor		Touch up these capacitors on the control PCB with solder.		V00 or P00

Photos of top and bottom side of control PCB.



Location of capacitors.

Please contact the Quality Assurance Department at (909) 444-8727 for further information.